WHAT IS CLAIMED IS:

1. A fuel cell assembly mounted in a vehicle, comprising:

a fuel cell stack comprising plural fuel cells stacked in a fixed direction;

a case housing the fuel cell stack and permitting expansion and contraction of the fuel cell stack in the fixed direction; and

an elastic member which supports the case in the vehicle.

2. The fuel cell assembly as defined in Claim 1, wherein the fuel cell assembly further comprises a first plate supporting one end of the fuel cell stack, a second plate fixed to the other end of the fuel cell stack, and a fluid supply/discharge block fixed to the case to cause a fluid required by the fuel cell stack to flow via the first plate, the fluid supply/discharge block being in close contact with the second plate via a gap which permits displacement of the second plate in the fixed direction.

3. The fuel cell assembly as defined in Claim 2, wherein the fuel cell assembly further comprises an expansion/contraction mechanism comprising a depression formed in the fluid supply/discharge block, and a projection formed in the second plate and inserted in the depression.

4. The fuel cell assembly as defined in Claim 3, wherein the expansion/contraction mechanism further comprises a passage which causes the fluid to flow through the projection between the fluid supply/discharge block and the second plate, and a seal member interposed between the projection and the depression.

5. The fuel cell assembly as defined in Claim 2, wherein the fuel cell assembly further comprises a bolt which fixes the first plate to the case, and is arranged in a perpendicular direction to the fixed direction.

6. The fuel cell assembly as defined in Claim 5, wherein the bolt passes through the first plate.

7. The fuel cell assembly as defined in Claim 6, wherein the first plate is made of an electrically conducting material, and the fuel cell assembly further comprises an insulating member which electrically insulates the bolt from the first plate.

8. The fuel cell assembly as defined in Claim 2, wherein the second plate is made of an electrically conducting material.

9. The fuel cell assembly as defined in Claim 2, wherein the fuel cell stack comprises two stack units arranged in parallel, the stack units are electrically connected in series via the second plate, the case comprises a coolant inlet and outlet, and the fluid supply/discharge block has a supply passage disposed parallel to the second plate which distributes coolant supplied to the inlet between the stack units, and a discharge passage disposed parallel to the second plate which recovers and leads coolant which has cooled the stack units to the outlet.

10. The fuel cell assembly as defined in Claim 2, wherein the fuel cell assembly further comprises a bolt which fixes the fluid supply/discharge block to the case,

and is arranged in a perpendicular direction to the fixed direction.

11. The fuel cell assembly as defined in Claim 10, wherein the bolt passes through the fluid supply/discharge block.

12. The fuel cell assembly as defined in Claim 2, wherein the fluid supply/discharge block is made of an electrically nonconductive material.

13. The fuel cell assembly as defined in Claim 1, wherein an elastic member comprises a rubber mount gripped by a bracket fixed to the case and a bracket fixed to the vehicle.

14. A fuel cell assembly mounted in a vehicle, comprising:

a fuel cell stack comprising plural fuel cells stacked in a fixed direction;

a case housing the fuel cell stack;

a supporting member which supports both ends of the fuel cell stack in the case; and

a bolt which fixes the supporting member to the case, the bolt extending in a perpendicular direction to the fixed direction.